

## CLAIMS

What is claimed is:

1           1.       A method comprising:

2           receiving a packet from a first network device to a second network device,  
3           wherein the first and second network devices are connected to form a link, the first  
4           network device and the second network device each having a version of a dynamic,  
5           intradomain, distributed, flat, single path, distance vector routing protocol, the packet  
6           identifying the first network device's routing protocol version;

7           determining whether the first network device's routing protocol version is the  
8           same as the second network device's routing protocol version; and

9           configuring the link such that the routing protocol versions of the first and  
10          second network devices are the same.

1           2.       The method of claim 1, wherein the version of the routing protocol of  
2           each network device is one of a triggered type or a periodic type, and the method further  
3           comprises detecting the first network device's routing protocol type, and determining  
4           whether the first network device's routing protocol type is the same as the second  
5           network device's routing protocol type.

1           3.       The method of claim 2 further comprising configuring the link such that the  
2           routing protocol types of the first and second network devices are the same .

1           4.       The method of claim 1 wherein the routing protocol is Routing  
2   Information Protocol (RIP).

1           5.       The method of claim 4 wherein the version of RIP is one of Version 1 or  
2   Version 2.

1           6.       The method of claim 5 wherein the version of the RIP of each network device  
2   is one of a triggered type or a periodic type .

1           7.       The method of claim 5, further comprising configuring the link such that  
2   the RIP versions of the first and second network devices are both Version 2.

1           8.       The method of claim 7 further comprising configuring the link such that  
2   the RIP Version 2 on both of the first and second network devices is triggered.

1           9.       A method comprising:  
2                    configuring a link including a first network device and a second network  
3   device, each network device including a dynamic, intradomain, distributed, flat, single  
4   path, distance vector routing protocol having a version and a type, such that the routing  
5   protocol versions of the first and second network devices are the same and the types of  
6   the routing protocol versions are the same.

1           10.      The method of claim 9 wherein the routing protocol is Routing  
2   Information Protocol (RIP).

1           11.     The method of claim 10 wherein the version of the RIP is one of Version  
2     1 or Version 2.

1           12.     The method of claim 11 wherein the version of the RIP of each network  
2     device is one of a triggered type or a periodic type .

1           13.     The method of claim 11 further comprising configuring the link such that  
2     the RIP on both of the first and second network devices is Version 2.

1           14.     The method of claim 13 further comprising configuring the link such that  
2     the RIP Version 2 on both of the first and second network devices is triggered.

1           15.     An apparatus comprising a machine accessible medium containing  
2     instructions which, when executed by a machine, cause the machine to perform  
3     operations comprising:

4           receiving a packet from a first network device to a second network device,  
5     wherein the first and second network devices are connected to form a link, the first  
6     network device and the second network device each having a version of a dynamic,  
7     intradomain, distributed, flat, single path, distance vector routing protocol, the packet  
8     identifying the first network device's routing protocol version,

9           determining whether the first network device's routing protocol version is the  
10    same as the second network device's routing protocol version; and

11          configuring the link such that the routing protocol versions of the first and  
12    second network devices are the same.

1           16.     The apparatus of claim 15, wherein the version of the routing protocol of  
2     each network device is one of a triggered type or a periodic type, and the method further  
3     comprises detecting the first network device's routing protocol type, and determining  
4     whether the first network device's routing protocol type is the same as the second  
5     network device's routing protocol type.

1           17.     The apparatus of claim 16 further comprising configuring the link such  
2     that the routing protocol types of the first and second network devices are the same.

1           18.     The apparatus of claim 15 wherein the routing protocol is Routing  
2     Information Protocol (RIP).

1           19.     The apparatus of claim 18 wherein the version of RIP is one of Version 1  
2     or Version 2.

1           20.     The apparatus of claim 18 wherein the version of the RIP of each  
2     network device is one of a triggered type or a periodic type .

1           21.     An apparatus comprising a machine accessible medium containing  
2     instructions which, when executed by a machine, cause the machine to perform  
3     operations comprising:

4                     configuring a link including a first network device and a second network  
5     device, each network device including a dynamic, intradomain, distributed, flat, single  
6     path, distance vector routing protocol having a version and a type, such that the routing

7 protocol versions of the first and second network devices are the same and the types of  
8 the routing protocol versions are the same.

1 22. The apparatus of claim 21 wherein the routing protocol is Routing  
2 Information Protocol (RIP).

1 23. The apparatus of claim 22 wherein the version of the RIP is one of  
2 Version 1 or Version 2.

1 24. The apparatus of claim 23 wherein the version of the RIP of each  
2 network device is one of a triggered type or a periodic type.

1 25. The apparatus of claim 23 further comprising configuring the link such  
2 that the RIP on both of the first and second network devices is Version 2.

1 26. The apparatus of claim 23 further comprising configuring the link such  
that the RIP Version 2 on both of the first and second network devices is triggered.